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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,223	05/30/2001	Doreen Lynn Galli	RSW920010033US1	8092

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IBM CORPORATION
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EXAMINER

KANG, INSUN

ART UNIT

PAPER NUMBER

2124

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/870,223	Applicant(s) GALLI, DOREEN LYNN	
	Examiner Insun Kang	Art Unit 2124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2001.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-16 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 30 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/30/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responding to application papers dated 5/30/2001.
2. Claims 1-16 are pending in the application.

Claim Objections

3. Claims 1-8 are objected to because of the following informalities: there appears to be typographical error in claim 1 (line 4): "compiled code" needs to be changed to "compiled code." As per claims 2-8, these claims are objected for dependency on the above rejected parent claim 1. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 8 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "substantially" in claims 8 and 16 are a relative term, which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Appropriate correction is required.

Drawings

6. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the various voice prompts such as different languages, different speakers etc. must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

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7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Osder et al. (US Patent 5,493,606) hereinafter referred to as "Osder."

Per claim 1:

Osder discloses:

- an application program that provides call flow instructions ("call flow and programmatic logic of the Network Application," col. 3 lines 5-15)
- wherein a call flow instruction that invokes a voice prompt provides a variable that can be read from outside compiled code of the application program ("The invention isolates the customization of the spoken prompts from the call flow and programmatic logic of the Network Application," col. 27 lines 26-41; "The voice for the elements can be recorded through NAP and stored in the NAP voice file," col. 3 lines 48-60)
- a programmable processor that executes the call flow instructions of the application program ("Prompt Expansion Processor (PEP) to play an identified prompt in a language identified by a SPIN application ID," abstract)
- a database that contains a plurality of pre-recorded voice prompts ("storage in records in the VU database to be referenced when playing the prompts," col. 1

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lines 60-64; "These prompt definitions are interactively generated by the user utilizing VU and are stored in records in the VU database," col. 2 lines 8-23)

- an assignment table that assigns a value to the variable to provide an entry point to the database ("Dynamic Element Table is enhanced to support the user-defined dynamic element types...permits a Network Application to play a designed prompt...without altering the functional code of the Network Application," col. 4 lines 20-25 and 33-37; "Expand Prompts...consults the appropriate prompt table ...for the prompt mapping in the cache tables," col. 26 lines 8-22) as claimed.

Per claim 2:

The rejection of claim 1 is incorporated, and further, Osder discloses:

- the database includes a first voice prompt in a first language and a second voice prompt in a second language, wherein the first language and the second language are different ("Index Prompt Tables under three different SPIN applications...to support three different languages," col. 6 lines 33-46) as claimed.

Per claim 9, it is the method version of claim 1, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 1 above. For the limitation "digitally encoded voice prompt," see Fig 3 and 4A.

Per claim 10, it is the method version of claim 2, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 2 above.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3-8 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osder et al. (US Patent 5,493,606) hereinafter referred to as "Osder."

Per claim 3:

The rejection of claim 1 is incorporated, further, Osder does not explicitly teach that the database includes a first voice prompt spoken by a first speaker and a second voice prompt spoken by a second speaker, wherein the first speaker and the second speaker are different. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include different voice prompts spoken by different speakers as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different purposes.

Per claim 4:

The rejection of claim 1 is incorporated, further, Osder does not explicitly teach that the database includes a first voice prompt spoken by a male speaker and a second voice

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prompt spoken by a female speaker. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include different voice prompts spoken by male and female speakers as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claim 5:

The rejection of claim 1 is incorporated, further, Osder does not explicitly teach that the database includes a first voice prompt having a first level of formality and a second voice prompt having a second level of formality, wherein the first level of formality and the second level of formality are different. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include different level of formality of voice prompts as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claim 6:

The rejection of claim 1 is incorporated, further, Osder does not explicitly teach that the database includes a voice prompt that includes music. However, it would have been obvious for one having ordinary skill in the art of computer software development and

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configuration to include music voice prompts as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claim 7:

The rejection of claim 1 is incorporated, further, Osder does not explicitly teach that the database includes a voice prompt that includes an audio tone. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include audio tone of voice prompts as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claim 8:

The rejection of claim 1 is incorporated, further, Osder does not explicitly teach that the database includes a first voice prompt and a second voice prompt spoken by the same speaker, wherein the first voice prompt and the second voice prompt convey substantially the same meaning, and wherein the first voice prompt and the second voice prompt differ in wording. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include various voice prompts such as including a dialect as callers may have different preferences and purposes. The modification would be obvious because one having

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ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claims 11-16, they are the method versions of claims 3-8, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 3-8 above.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. (US Patent 6,718,017) hereinafter referred to as "Price" in view of Schemers III et al. (US Pub. 2003/0083882) hereinafter referred to as "Schemers."

Per claim 1:

Price discloses:

- an application program that provides call flow instructions ("Once an IVR application is in operation, a variety of control functions can be performed," col. 1 lines 63-67)
- wherein a call flow instruction that invokes a voice prompt provides a variable that can be read from outside compiled code of the application program ("an IVR application

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which a customer company can call and utilize to develop their own individually tailored IVR application... a first IVR application is used to develop a new second IVR application ... Thus a first IVR application would be used to control the functions of a second IVR application,” col. 2 lines 20-37; “Voice prompts for an IVR application would be stored either in the non-volatile memory... or in the audio recorder/player,” col. 5 lines 47-58) -a programmable processor that executes the call flow instructions of the application program (“the processor is configured to integrate recorded voice prompts into the generated interactive voice response application,” col. 11 lines 11-16; “the software for implementing an IVR application... would be run by the processor,” col. 5 lines 47-58) -a database that contains a plurality of pre-recorded voice prompts (“the IVR application can be used to allow a caller to access prerecorded information,” col. 1 lines 25-33);

Price teaches the “voice prompts of an IVR application can be stored and replayed in various different ways (col. 4 lines 25-31)” but does not explicitly teach an assignment table that assigns a value to the variable to provide an entry point to the database. However, Schemers teaches it was known in the art of software development and configuration, at the time applicant's invention was made, to easily add new elements to “a running system on-the-fly,” (page 2 paragraph 0017) such as that disclosed in Schemers. It would have been obvious for one having ordinary skill in the art of computer software development and configuration to modify Prices' disclosed system to use an assignment table that assigns a value to the variable to provide an entry point to the database (“Tables... contain mappings used by the execution core... to determine the storage locations of the internal element code..., internal function

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code...and internal object code..., based on the referencing extension elements. Other element code...are stored in external element files," page 3 paragraph 0027). The modification would be obvious because one having ordinary skill in the art would be motivated to easily customize and maintain IVR systems without requiring extensive engineering development effort as suggested by Schemers (page 3 paragraph 0034).

Per claim 2:

The rejection of claim 1 is incorporated, further, Price and Schemers do not explicitly teach that the database includes a first voice prompt in a first language and a second voice prompt in a second language, wherein the first language and the second language are different. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include different languages of voice prompts as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different purposes.

Per claim 3:

The rejection of claim 1 is incorporated, further, Price and Schemers do not explicitly teach that the database includes a first voice prompt spoken by a first speaker and a second voice prompt spoken by a second speaker, wherein the first speaker and the second speaker are different. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include different voice prompts spoken by different speakers as callers may have different

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preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different purposes.

Per claim 4:

The rejection of claim 1 is incorporated, further, Price and Schemers do not explicitly teach that the database includes a first voice prompt spoken by a male speaker and a second voice prompt spoken by a female speaker. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include different voice prompts spoken by male and female speakers as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claim 5:

The rejection of claim 1 is incorporated, further, Price and Schemers do not explicitly teach that the database includes a first voice prompt having a first level of formality and a second voice prompt having a second level of formality, wherein the first level of formality and the second level of formality are different. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include different level of formality of voice prompts as callers may have different preferences and purposes. The modification would be obvious because one

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having ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claim 6:

The rejection of claim 1 is incorporated, further, Price and Schemers do not explicitly teach that the database includes a voice prompt that includes music. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include music voice prompts as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claim 7:

The rejection of claim 1 is incorporated, further, Price and Schemers do not explicitly teach that the database includes a voice prompt that includes an audio tone. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include audio tone of voice prompts as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claim 8:

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The rejection of claim 1 is incorporated, further, Price and Schemers do not explicitly teach that the database includes a first voice prompt and a second voice prompt spoken by the same speaker, wherein the first voice prompt and the second voice prompt convey substantially the same meaning, and wherein the first voice prompt and the second voice prompt differ in wording. However, it would have been obvious for one having ordinary skill in the art of computer software development and configuration to include various voice prompts such as including a dialect as callers may have different preferences and purposes. The modification would be obvious because one having ordinary skill in the art would be motivated to provide callers various voice prompt options for different preferences.

Per claim 9, it is the method version of claim 1, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 1 above. Price further discloses a digitally encoded voice prompt ("The audio recorder and player could comprise a separate processor and/or memory storage device which records voice prompts in a digital format. The audio recorder and player 58 might also be capable of reproducing voice prompts or audio sounds from the recorded digital signals," col. 4 lines 2-41).

Per claims 10-16, they are the method versions of claims 2-8, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 2-8 above.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 703-305-6465.


The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 703-305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IK

7/20/2004


ANIL KHATRI
PRIMARY EXAMINER